

REMARKS

The present application was filed on August 15, 2001 with claims 1-38. In the outstanding Office Action dated October 20, 2004, the Examiner has: (i) indicated that the oath or declaration is defective; (ii) objected to claims 1-35 and 37-38 as being not consecutively numbered; (iii) rejected claims 7-12, 14, 17-21 and 25 under 35 U.S.C. §112, second paragraph, as being indefinite; (iv) rejected claims 1, 6, 7, 12, 19, 22, 25, 26, 29, 32 and 35-37 under 35 U.S.C. §102(e) as being anticipated by the reference "WMLScript Crypto Library," Version 05-Nov-1999, *Wireless Application Forum, Ltd.*, pp. 2-17 (hereinafter "WMLScript"); (v) rejected claims 2 and 8 under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of U.S. Patent No. 6,704,736 to Rys et al. (hereinafter "Rys"); (vi) rejected claims 3 and 9 under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of U.S. Patent Application Publication No. US 2004/0181756 A1 to Berringer et al. (hereinafter "Berringer"); (vii) rejected claims 4, 5, 10 and 11 under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of Berringer, and further in view of the reference "XML-Signature Core Syntax, W3C Working Draft 20-Oct-1999, *The Internet Society & W3C* (hereinafter "XML-Signature"); (viii) rejected claims 13-15, 17, 27, 28, 30, 31, 33 and 34 under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of U.S. Patent No. 6,671,805 to Brown et al. (hereinafter "Brown"); (ix) rejected claims 16 and 18 under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of Brown, and further in view of Rys; and (x) rejected claims 20, 21, 23 and 24 under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of Berringer, and further in view of XML-Signature.

In this response, Applicants submit herewith a new declaration in compliance with 37 C.F.R. 1.67(a) and acknowledge the renumbering of claims 37 and 38 as 36 and 37, respectively, by the Examiner. In compliance with 35 U.S.C. §119(b), a Certified Copy of Japanese priority application No. 2000-262955, filed on August 31, 2000, is submitted herewith, as requested by the Examiner. Claim 25 has been canceled without prejudice, and claims 1, 7, 13-15, 17, 19 and 22 have been amended. Applicants traverse the §112, §102(e) and §103 rejections for at least the reasons set forth below. Applicants respectfully request reconsideration of the present application in view of the above amendments and the following remarks.

Claims 7-12, 14, 17-21 and 25 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. With regard to claims 7-12, 14 and 17-21, the Examiner contends that it is not clear where the corresponding structure for the means plus function language recited in the subject claims can be found (Office Action; page 3, paragraph 3). Applicants respectfully disagree with this contention and submit that the specification provides support for such means-plus-function language, for example on page 10, line 23 to page 11, line 21, on page 23, line 22 to page 24, line 10, and in FIG. 1. Claim 25 has been canceled without prejudice, and therefore the §112 rejection of claim 25 will not be further addressed herein. Accordingly, withdrawal of the §112 rejection of claims 7-12, 14 and 17-21 is respectfully solicited.

Claims 1, 6, 7, 12, 19, 22, 25, 26, 29, 32 and 35-37 stand rejected under 35 U.S.C. §102(e) as being anticipated by the reference WMLScript. With regard to independent claims 1, 7 and 25, the Examiner contends that WMLScript discloses each and every limitation set forth in the subject claims. Regarding independent claims 19 and 22, the Examiner contends that WMLScript further discloses receiving summary text. Applicants respectfully disagree with these contentions. The WMLScript reference is merely a document which specifies the library interface for WMLScript for providing cryptographic functionality of a Wireless Application Protocol (WAP) client (WMLScript; page 3, section 1). While the WMLScript reference may disclose certain script functions (e.g., *signedString*, *stringToSign*, etc.) and parameters relating thereto, this reference fails to disclose a digital signature methodology and/or system which includes each of the elements recited in the subject claims.

Notwithstanding the above traversal, claims 1, 7, 19 and 22 have been amended to further clarify the invention. Specifically, claim 1, and claims 7, 19 and 22 which are of similar scope, require an agent generating summary text from an electronic document to be signed, and the agent generating a signed document including a signature value generated in the terminal based on data encrypted using a private key stored in the terminal. These claims further specify that the terminal calculates a digest value for the summary text and encrypts data, including the digest value, using a private key stored in the terminal. By off-loading the functions of generating summary text from the electronic document and generating the signed document including the signature value to an agent, the terminal (e.g., PDA) used by the signatory does not require an XML processor and/or

XPath processor. The prior art of record fails to teach or suggest at least these features of the subject claims.

With regard to the above features, the Examiner acknowledges that the WMLScript reference “does not disclose utilizing an agent to generate summary text for the electronic document and generate the signed document” (Office Action; page 7, last paragraph). However, the Examiner contends that such features are disclosed in the Brown reference, at column 18, line 55 to column 19, line 9, as addressed in conjunction with the rejection of claim 13. Applicants respectfully disagree with this contention. Brown is directed to a system and method for document-driven processing of digitally-signed electronic documents. The system includes a plurality of stations, each station including a parser and at least one processing service (Brown; column 15, lines 29-31). The station is configured to receive a processing instruction and to direct the instruction to a given one of the processing services for executing the instruction (Brown; column 16, lines 30-41). Nowhere does Brown disclose that the processing service in a given station acts as an agent for mediating an electronic transaction between a signature demandant and a signatory, as required by the subject claims.

Brown fails to disclose an agent generating summary text from an electronic document to be signed. While Brown may disclose that a “second service 600 that may be provided by a processing station 502 is the document creation service 702” (Brown; column 18, lines 55-56), this second service cannot reasonably be analogized to the agent recited in the subject claims, at least in part, because the second service does not mediate an electronic transaction between two parties, as required by the subject claims. Furthermore, Brown teaches that the document creation service merely “retrieves a document template corresponding to a specified document type and copies specified portions of the initial document 102 into the new document 102” (Brown; column 18, lines 60-63). The document template in Brown is not analogous to the summary text generated by the agent and transmitted to the terminal for display in the claimed invention. Brown also fails to teach or suggest generating summary text including essential information from the electronic document to be confirmed, as recited in the subject claims.

For at least the reasons given above, Applicants assert that claims 1, 7, 19 and 22 are believed to be patentable over the prior art. Accordingly, favorable reconsideration and allowance of these claims are respectfully requested.

With regard to claims 6, 26 and 29, which depend from claim 1, claims 12 and 32, which depend from claim 7, claims 35, which depends from claim 19, and claims 36 and 37, which depend from claim 22, Applicants submit that these claims are also patentable over the prior art of record by virtue of their dependency from their respective base claims, which are believed to be patentable for at least the reasons given above. Accordingly, favorable reconsideration and allowance of claims 6, 12, 26, 29 and 32 are respectfully requested.

Claims 2 and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of Rys. With regard to these claims, the Examiner acknowledges that the WMLScript reference “does not disclose using XML and an Xpath parser” (Office Action; page 5, first paragraph), but contends that Rys supplements the deficiencies of the WMLScript reference. Rys relates to “the conversion of hierarchical information or data to a relational database model” and vice versa (Rys; column 1; lines 10-13). While Rys may involve transforming XML data into another format type (Rys; column 1, lines 58-61), Rys does not relate to digital signature systems and methodologies. Likewise, WMLScript relates to signing text and does not disclose using XML or XPath processing. Applicants submit that there is no motivation to combine the WMLScript reference with the Rys reference, and thus it is believed that a *prima facie* case of obviousness has not been established.

Nonetheless, Applicants assert that claim 2, which depends from claim 1, and claim 8, which depends from claim 7, are patentable over the prior art of record by virtue of their dependency from their respective base claims, which are believed to be patentable for at least the reasons given above. Accordingly, favorable reconsideration and allowance of claims 2 and 8 are respectfully solicited.

Claims 3 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of Berringer. With regard to these claims, the Examiner acknowledges that the WMLScript reference “does not disclose using a signature template having a variable field for said digest value, employing said function to convert said signature template to which said digest value has been added, and employing said private key to encrypt a value obtained by conversion and

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generating said signature value” (Office Action; page 5, last paragraph). However, the Examiner contends that Berringer discloses such additional features. Applicants respectfully disagree with this contention.

Berringer, in paragraph [0011], discloses “providing systems and methods for digitally signing and verifying electronic documents by embedding the digital signatures in the electronic documents” (emphasis added). The invention set forth in claims 3 and 9, by contrast, specifically requires that a digest value, which the Examiner analogizes with the digital signature of Berringer, is calculated for summary text generated by an agent from an electronic document. The terminal of the claimed invention is not configured for embedding a digital signature in the document itself, as this would negate an important objective of the invention, namely, to allow a signatory using a simple terminal to be able to confirm essential information relating to an electronic transaction which would otherwise not be suitable for display on the terminal. Berringer, thus, teaches away from the claimed invention in at least this respect.

Notwithstanding the above traversal, Applicants assert that claim 3, which depends from claim 1, and claim 9, which depends from claim 7, are patentable over the prior art of record by virtue of their dependency from their respective base claims, which are believed to be patentable for at least the reasons set forth above. Accordingly, favorable reconsideration and allowance of claims 3 and 9 are respectfully requested.

Claims 4, 5, 10 and 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of Berringer, and further in view of the XML-Signature reference. The Examiner acknowledges that neither WMLScript nor Berringer “disclose that a URI for the electronic document is part of the data to be signed and using a canonicalization algorithm” (Office Action; page 6, last paragraph). However, the Examiner contends that XML-Signature discloses such additional features. Applicants respectfully disagree with this contention and submit that, while the XML-Signature reference may disclose creating an “ObjectReference element(s)” using a canonicalization algorithm (XML-Signature; section 8.1), it fails to teach or suggest generating a signature template which “is canonicalized using a predetermined algorithm,” as required by one or more of the subject claims. Furthermore, Applicants assert that claims 4 and 5, which depend from claim 1, and claims 10 and 11, which depend from claim 7, are also patentable over the prior

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art of record by virtue of their dependency from their respective base claims, which are believed to be patentable for at least the reasons given above. Accordingly, favorable reconsideration and allowance of claims 4, 5, 10 and 11 are respectfully solicited.

Claims 13-15, 17, 27, 28, 30, 31, 33 and 34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of Brown. With regard to independent claims 13-15 and 17, the Examiner acknowledges that WMLScript does not disclose “utilizing an agent to generate summary text for the electronic document and generate the signed document” (Office Action; page 7, last paragraph). However, the Examiner contends that Brown teaches such features. Applicants respectfully disagree with this contention.

As previously stated, Brown fails to disclose an agent generating summary text from an electronic document to be signed. While Brown may disclose that a “second service 600 that may be provided by a processing station 502 is the document creation service 702” (Brown; column 18, lines 55-56), this second service cannot reasonably be analogized to the agent recited in the subject claims, at least in part, because the second service does not mediate an electronic transaction between two parties, as required by the subject claims. Furthermore, Brown teaches that the document creation service merely “retrieves a document template corresponding to a specified document type and copies specified portions of the initial document 102 into the new document 102” (Brown; column 18, lines 60-63). The document template in Brown is not analogous to the summary text generated by the agent and transmitted to the terminal for display in the claimed invention. Brown also fails to teach or suggest generating summary text including essential information from the electronic document to be confirmed, as recited in the subject claims.

For at least the reasons set forth above, Applicants assert that claims 13-15 and 17 are believed to be patentable over the prior art of record. Accordingly, favorable reconsideration and allowance of these claims are respectfully requested.

With regard to claims 27 and 30, which depend from claim 13, claims 33, which depends from claim 14, claims 28 and 31, which depend from claim 15, and claim 34, which depends from claim 17, Applicants submit that these claims are also patentable over the prior art of record by virtue of their dependency from their respective base claims, which are believed to be patentable for

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at least the reasons given above. Accordingly, favorable reconsideration and allowance of claims 27, 28, 30, 31, 33 and 34 are respectfully solicited.

Claims 16 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over WMLScript in view of Brown, and further in view of Rys. The Examiner acknowledges that neither WMLScript nor Brown “disclose using XML and an Xpath parser” (Office Action; page 8, last paragraph). However, the Examiner contends that Rys discloses such additional features of the subject claims. Applicants respectfully disagree with this contention. As set forth above in connection with claims 2 and 8, Applicants assert that Rys fails to supplement the deficiencies of WMLScript and Brown. Specifically, while Rys may disclose transforming XML data into another format type (Rys; column 1, lines 58-61), Rys does not relate to digital signature systems and methodologies. Likewise, WMLScript relates to signing text and does not disclose using XML or XPath processing. Applicants submit that there is no motivation to combine the WMLScript reference with the Rys reference, and therefore it is believed that a *prima facie* case of obviousness has not been met.

Nonetheless, Applicants assert that claim 16, which depends from claim 15, and claim 18, which depends from claim 17, are patentable over the prior art of record by virtue of their dependency from their respective base claims, which are believed to be patentable for at least the reasons given above. Accordingly, favorable reconsideration and allowance of claims 16 and 18 are respectfully requested.

Finally, claims 20, 21, 23 and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over WMLScript, in view of Berringer, and further in view of XML-Signature. Applicants submit that these are similar in scope to claims 3 and 9, and therefore are believed to be patentable for at least the reasons given above in connection with claims 3 and 9. Moreover, Applicants assert that claims 20 and 21, which depend from claim 19, and claims 23 and 24, which depend from claim 22, are patentable over the prior art of record by virtue of their dependency from their respective base claims, which are believed to be patentable for at least the reasons set forth above. Accordingly, favorable reconsideration and allowance of claims 20, 21, 23 and 24 are respectfully requested.

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In view of the foregoing, Applicants believe that pending claims 1-24 and 26-37 are in condition for allowance, and respectfully request withdrawal of the §112, §102 and §103 rejections.

Respectfully submitted,



Date: January 20, 2005

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Enclosure(s): Certified Copy of Japanese Priority Application No. 2000-262955,
filed on August 31, 2000;
New Declaration and Power of Attorney